



6560-50-P

**ENVIRONMENTAL PROTECTION AGENCY**

**40 CFR Parts 52 and 81**

**[EPA-R03-OAR-2019-0262; FRL-9996-73-Region 3]**

**Approval and Promulgation of Air Quality Implementation Plans;  
Pennsylvania; Redesignation Requests and Maintenance Plans for Delaware County and  
Lebanon County 2012 Fine Particulate Matter Areas**

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Proposed rule.

**SUMMARY:** The Environmental Protection Agency (EPA) is proposing to approve state implementation plan (SIP) revisions submitted by the Commonwealth of Pennsylvania.

On January 23, 2019 and February 11, 2019, respectively, the Pennsylvania Department of Environmental Protection (PADEP) submitted requests for EPA to redesignate to attainment of the 2012 annual fine particulate matter (PM<sub>2.5</sub>) national ambient air quality standards (NAAQS) the Delaware County and Lebanon County nonattainment areas (the Delaware and Lebanon Areas or the Areas). EPA is proposing to grant PADEP's requests and to determine that the Delaware and Lebanon Areas meet the 2012 annual PM<sub>2.5</sub> NAAQS, based on the most recent three years of certified air quality data. The effect of this proposed action, if finalized, would be to change the designation status of the Delaware and Lebanon Areas from nonattainment to attainment for the 2012 annual PM<sub>2.5</sub> NAAQS, thereby removing the requirement for a nonattainment new source review (NNSR) permitting program and stopping the sanctions clock associated with a finding of failure to submit NNSR updates for the 2012 annual PM<sub>2.5</sub> NAAQS. EPA is also proposing to approve PADEP's plans to ensure that the Delaware and Lebanon Areas continue to meet the 2012 PM<sub>2.5</sub> NAAQS through 2030 (maintenance plans) as revisions

to the Pennsylvania SIP. The maintenance plans for the Delaware and Lebanon Areas include 2014, 2022, and 2030 motor vehicle emissions budgets (MVEBs) for mobile sources of PM<sub>2.5</sub> and nitrogen oxides (NO<sub>x</sub>). Finally, EPA is proposing to find these 2014, 2022, and 2030 MVEBs for PM<sub>2.5</sub> and NO<sub>x</sub> adequate and to approve these MVEBs into the Pennsylvania SIP for transportation conformity purposes. This action is being taken under the Clean Air Act (CAA).

**DATES:** Written comments must be received on or before **[insert date 30 days after date of publication in the Federal Register]**.

**ADDRESSES:** Submit your comments, identified by Docket ID No. EPA-R03-OAR-2019-0262 at <https://www.regulations.gov>, or via email to [spielberger.susan@epa.gov](mailto:spielberger.susan@epa.gov). For comments submitted at Regulations.gov, follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed from Regulations.gov. For either manner of submission, EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be confidential business information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. EPA will generally not consider comments or comment contents located outside of the primary submission (i.e. on the web, cloud, or other file sharing system). For additional submission methods, please contact the person identified in the "For Further Information Contact" section. For the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit <http://www2.epa.gov/dockets/commenting-epa-dockets>.

**FOR FURTHER INFORMATION CONTACT:** Maria A. Pino, Planning & Implementation

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**SUPPLEMENTARY INFORMATION:**

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## VI. Proposed Action

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### **I. What are the actions EPA is proposing?**

EPA is taking several actions related to the redesignation of the Delaware and Lebanon Areas to attainment of the 2012 annual PM<sub>2.5</sub> NAAQS. EPA is proposing that the Delaware and Lebanon moderate nonattainment areas are attaining the 2012 annual PM<sub>2.5</sub> NAAQS. EPA is also proposing to approve Pennsylvania's 2012 annual PM<sub>2.5</sub> maintenance plans for the Delaware and Lebanon Areas as revisions to the Pennsylvania SIP. These maintenance plans include MVEBs for PM<sub>2.5</sub> and NO<sub>x</sub> for the years 2014, 2022, and 2030. Further, EPA is also proposing to find that Pennsylvania meets the requirements for redesignation of the Delaware and Lebanon Areas to attainment of the 2012 annual PM<sub>2.5</sub> NAAQS under section 107(d)(3)(E) of the CAA. EPA is thus proposing to grant Pennsylvania's request to change the designation of the Delaware and Lebanon Areas from nonattainment to attainment of the 2012 annual PM<sub>2.5</sub> NAAQS. Finally, EPA is proposing to find the 2014, 2022, and 2030 MVEBs for PM<sub>2.5</sub> and NO<sub>x</sub> adequate and is proposing to approve these MVEBs into the Pennsylvania SIP for transportation conformity purposes. The adequacy comment period for these MVEBs will begin upon publication of this Notice of Proposed Rulemaking (NPRM) with EPA's posting of the availability of Pennsylvania's maintenance plan submittal for the Delaware and Lebanon Areas on EPA's Adequacy Website which can be found at <https://www.epa.gov/state-and-local-transportation>. Please see section V of today's rulemaking for further explanation of the MVEBs and the adequacy process.

### **II. What is the background for these actions?**

Particulate matter (PM) is the term for a mixture of solid particles and liquid droplets found in the air. Some particles, such as dust, dirt, soot, or smoke, are large or dark enough to be seen with the naked eye. Others are so small they can only be detected using an electron microscope. PM<sub>2.5</sub> is made of fine inhalable particles with diameters that are 2.5 micrometers and smaller. PM<sub>2.5</sub> can be emitted directly from a source, such as construction sites, unpaved roads, fields, smokestacks or fires. However, most PM<sub>2.5</sub> is formed in the atmosphere as a result of complex reactions. The chemicals that form this “secondary” PM<sub>2.5</sub>, known as “precursors” are sulfur dioxide (SO<sub>2</sub>), NO<sub>x</sub>, volatile organic compounds (VOCs), and ammonia (NH<sub>3</sub>). PM<sub>2.5</sub> precursors are pollutants emitted by a wide range of sources, such as power plants, industrial processes, and automobiles.

On December 14, 2012, EPA promulgated a revised primary annual PM<sub>2.5</sub> NAAQS to provide increased protection of public health from fine particle pollution. 78 FR 3086 (January 15, 2013). In that action, EPA strengthened the primary annual PM<sub>2.5</sub> standard from 15.0 micrograms per cubic meter (µg/m<sup>3</sup>) to 12.0 µg/m<sup>3</sup>. An area is considered to be attainment for that NAAQS when the 3-year average of the annual arithmetic mean of the ambient air quality monitoring data collected at each monitor in the area does not exceed 12.0 µg/m<sup>3</sup>. On December 18, 2014, the EPA Administrator signed a final action promulgating initial designations for the 2012 primary PM<sub>2.5</sub> NAAQS based on 2011-2013 air quality monitoring data for the majority of the United States. 80 FR 2206 (January 15, 2015). In that action, the Delaware Area, which consists of Delaware County, Pennsylvania, and the Lebanon Area, which consists of Lebanon County, Pennsylvania, were designated as moderate nonattainment areas for the 2012 annual PM<sub>2.5</sub> NAAQS. See 40 CFR 81.339.

On April 6, 2018, EPA published a “finding of failure to submit” required SIP elements for the 2012 annual PM<sub>2.5</sub> NAAQS for several nonattainment areas nationwide, including the Delaware and Lebanon Areas. See 83 FR 14759. EPA's finding of failure to submit, effective May 7, 2018, included a determination that Pennsylvania had not met its obligations for the NNSR permit program because Pennsylvania did not regulate emissions of VOCs and NH<sub>3</sub> as PM<sub>2.5</sub> precursors. Sanctions associated with this finding for the Delaware and Lebanon Areas will take effect on November 7, 2019, unless EPA fully approves the Pennsylvania's redesignation requests by November 7, 2019. As NNSR is not required in attainment areas, upon final redesignation of the Delaware and Lebanon Areas to attainment, the NNSR updates will no longer be required for the Areas, thus nullifying the findings of failure to submit and stopping the sanctions clock.

### **III. What are the criteria for redesignation to attainment?**

Section 107(d)(3)(E) of the CAA allows redesignation of an area to attainment of the NAAQS provided that: (1) The Administrator (EPA) determines that the area has attained the applicable NAAQS; (2) the Administrator has fully approved the applicable implementation plan for the area under section 110(k) of the CAA; (3) the Administrator determines that the improvement in air quality is due to permanent and enforceable reductions in emissions resulting from implementation of the applicable SIP, applicable Federal air pollutant control regulations, and other permanent and enforceable emission reductions; (4) the Administrator has fully approved a maintenance plan for the area as meeting the requirements of section 175A of the CAA; and (5) the state containing the area has met all requirements applicable to the area for purposes of redesignation under section 110 and part D of title I of the CAA.

On April 16, 1992, EPA provided guidance on redesignations in the General Preamble for the Implementation of Title I of the CAA Amendments of 1990 (57 FR 13498) and supplemented this guidance on April 28, 1992 (57 FR 18070). EPA has provided further guidance on processing redesignation requests in the following documents:

1. “Procedures for Processing Requests to Redesignate Areas to Attainment,” Memorandum from John Calcagni, Director, Air Quality Management Division, September 4, 1992 (Calcagni memorandum);
2. “State Implementation Plan (SIP) Actions Submitted in Response to Clean Air Act (CAA) Deadlines,” Memorandum from John Calcagni, Director, Air Quality Management Division, October 28, 1992;
3. “Part D New Source Review (Part D NSR) Requirements for Areas Requesting Redesignation to Attainment,” Memorandum from Mary D. Nichols, Assistant Administrator for Air and Radiation, October 14, 1994 (Nichols memorandum); and
4. “State Implementation Plan (SIP) Requirements for Areas Submitting Requests for Redesignation to Attainment of the Ozone and Carbon Monoxide (CO) National Ambient Air Quality Standards (NAAQS) on or after November 15, 1992,” Memorandum from Michael H. Shapiro, Acting Assistant Administrator for Air and Radiation memorandum, September 17, 1993 (Shapiro memorandum).

These memoranda are available in the docket for this rulemaking action, available online at <https://www.regulations.gov>, Docket ID: EPA-R03-OAR-2019-0262.

#### **IV. What is EPA’s analysis of Pennsylvania’s redesignation request for the Delaware and Lebanon Areas?**

EPA is proposing to redesignate the Delaware and Lebanon Areas to attainment for the 2012

annual PM<sub>2.5</sub> NAAQS and to approve Pennsylvania's related maintenance plans. The basis for EPA's actions is as follows:

**A. Have the Delaware and Lebanon Areas attained the 2012 annual PM<sub>2.5</sub> NAAQS?**

To redesignate an area from nonattainment to attainment, the CAA requires EPA to determine that the area has attained the applicable NAAQS (CAA section 107(d)(3)(E)(i)). For PM<sub>2.5</sub>, an area is attaining the 2012 annual PM<sub>2.5</sub> NAAQS if it meets the standard, as determined in accordance with 40 CFR 50.13 and appendix N of 40 CFR part 50, based on three complete, consecutive calendar years of quality-assured air quality monitoring data. To attain the 2012 annual PM<sub>2.5</sub> NAAQS, the 3-year average of the annual arithmetic mean concentration, as determined in accordance with 40 CFR part 50, appendix N, must be less than or equal to 12.0 µg/m<sup>3</sup> at all relevant monitoring sites in the subject area over a 3-year period. The relevant data must be collected and quality-assured in accordance with 40 CFR part 58 and recorded in the EPA Air Quality System (AQS) database.

On December 13, 2016, EPA determined that the Delaware Area first attained the 2012 annual PM<sub>2.5</sub> NAAQS based on 2013-2015 ambient air quality monitoring data. See 81 FR 89868 and 82 FR 8499. On March 6, 2018, EPA determined that the Lebanon Area first attained the 2012 annual PM<sub>2.5</sub> NAAQS based on 2014-2016 ambient air quality monitoring data. See 83 FR 9435. These determinations of attainment, or “clean data determinations” suspended certain planning requirements for the Areas, including the requirement to submit an attainment demonstration and associated reasonably available control measures (RACM), including reasonable available control technology (RACT), a reasonable further progress (RFP) plan, and contingency measures for failure to attain or meet RFP. These requirements are suspended for as



long as the Areas continue to meet the 2012 annual PM<sub>2.5</sub> NAAQS. When the Areas are redesignated to attainment, the requirements are permanently discharged.

There are two ambient air quality monitors in the Delaware Area and one in the Lebanon Area. EPA reviewed the certified, quality assured/quality controlled PM<sub>2.5</sub> monitoring data for 2015-2017 from the monitors in the Delaware and Lebanon Areas and determined that the design values are less than or equal to 12.0 µg/m<sup>3</sup>, and therefore the areas continue to meet the 2012 annual PM<sub>2.5</sub> NAAQS. In addition, EPA evaluated preliminary 2016-2018 monitoring data for all three monitors, which also shows continued attainment of the 2012 annual PM<sub>2.5</sub> NAAQS. Therefore, EPA is proposing to determine that the Delaware and Lebanon Areas are attaining the 2012 annual PM<sub>2.5</sub> NAAQS. This proposed determination is based on the most recent three years of complete, certified and quality-assured data, which is for the 2015-2017 monitoring period. The monitoring data is summarized in Tables 1 and 2 and is also available in the docket for this rulemaking action available online at <https://www.regulations.gov>, Docket ID: EPA-R03-OAR-2019-0262.

**Table 1. 2013 to 2018 Annual Means at Delaware County and Lebanon County Monitors**

Area/ County	Monitor ID	Annual Means in µg/m <sup>3</sup>					
		2013	2014	2015	2016	2017	Preliminary 2018
Delaware	42-045-0002	11.5	12.6	10.7	11.0	9.1	12.1
Delaware	42-045-0109	*	*	10.6	9.3	8.3	10.8
Lebanon	42-075-0100	11.2	12.7	11.2	9.7	9.3	8.8

\*Monitor 42-045-0109 started operation on 1/1/2015. Therefore, it did not record data in 2013 and 2014.

**Table 2. 2015 to 2018 Annual Design Values at Delaware County and Lebanon County Monitors**

Area/ County	Monitor ID	Annual Design Values in µg/m <sup>3</sup>			
		2013-2015	2014-2016	2015-2017	Preliminary 2016-2018
Delaware	42-045-0002	11.6	11.5	10.3	10.7

Delaware	42-045-0109	*	*	9.4	9.4
Lebanon	42-075-0100	11.7**	11.2	10.1	9.3

\*Monitor 42-045-0109 started operation on 1/1/2015. Therefore, the 2013-2015 and 2014-2016 design values at this monitor are not valid because they do not meet EPA's completeness criteria in appendix N to 40 CFR part 50.

\*\*The 2013-2015 design value at monitor 42-075-0100 is not valid because the 2015 data at that monitor does not meet EPA's completeness criteria in appendix N to 40 CFR part 50.

EPA has reviewed the ambient air quality monitoring data in the Delaware and Lebanon Areas, consistent with the requirements contained at 40 CFR part 50. EPA's review focused on data recorded in the EPA AQS database, for the Delaware and Lebanon Areas for PM<sub>2.5</sub> nonattainment area from 2015 to 2017. EPA also considered preliminary data for 2018, which have not been certified, but which are consistent with the area's continued attainment.

All monitors in the Delaware and Lebanon Areas recorded complete data in accordance with criteria set forth by EPA in 40 CFR part 50, appendix N, where a complete year of air quality data comprises four calendar quarters, with each quarter containing data from at least 75 percent (%) capture of the scheduled sampling days. Available data are sufficient for comparison to the NAAQS.

**B. Has Pennsylvania met all applicable requirements of section 110 and part D of the CAA for the Delaware and Lebanon Areas and do the Delaware and Lebanon Areas have a fully approved SIP under section 110(k) of the CAA?**

In accordance with section 107(d)(3)(E)(v) of the CAA, Pennsylvania must meet all the requirements applicable to the Areas under section 110 of the CAA (general SIP requirements) and part D of Title I of the CAA (SIP requirements for nonattainment areas). Under section 107(d)(3)(E)(ii) of the CAA, Pennsylvania's SIP revisions for the 2012 annual PM<sub>2.5</sub> NAAQS for the Delaware and Lebanon Areas must be fully approved under section 110(k) of the CAA.

Section 110(k) of the CAA sets out the requirements for EPA's actions on SIP revision submittals.

The September 4, 1992 Calcagni memorandum describes EPA's interpretation of section 107(d)(3)(E) with respect to the timing of applicable requirements. Under this interpretation, to qualify for redesignation, states requesting redesignation to attainment must meet only the relevant CAA requirements that come due prior to the submittal of a complete redesignation request. See also Shapiro memorandum, September 17, 1993, and 60 FR 12459, 12465-12466, (March 7, 1995) (redesignation of Detroit-Ann Arbor). Applicable requirements of the CAA that come due subsequent to the area's submittal of a complete redesignation request remain applicable until a redesignation is approved but are not required as a prerequisite to redesignation. See CAA section 175A(c). *Sierra Club v. EPA*, 375 F.3d 537 (7th Cir. 2004). See also 68 FR 25418, 25424 and 25427 (May 12, 2003) (redesignation of the St. Louis/East St. Louis area to attainment of the 1-hour ozone NAAQS).

In the case of the Delaware and Lebanon Areas, the base year emissions inventory was due prior to Pennsylvania's submittal of the complete redesignation requests for the Areas. Therefore, the base year inventories are applicable requirements. The attainment plans, including RACM/RACT, and contingency measures for failure to attain or meet RFP, were also due prior to Pennsylvania's submittal of complete redesignation requests for the Areas. However, as described in detail later in this rulemaking, clean data determinations for the Areas suspended these requirements for as long as the Areas continues to meet the 2012 annual PM<sub>2.5</sub> NAAQS. When the Areas are redesignated to attainment, these requirements are permanently discharged.

**Pennsylvania has met the section 110 general SIP requirements.**

Section 110(a)(2) of Title I of the CAA delineates the general requirements for a SIP, which include enforceable emissions limitations and other control measures, means, or techniques, provisions for the establishment and operation of appropriate devices necessary to collect data on ambient air quality, and programs to enforce the limitations. The general SIP elements and requirements set forth in section 110(a)(2) of the CAA include, but are not limited to the following: (1) Submittal of a SIP that has been adopted by the state after reasonable public notice and hearing; (2) provisions for establishment and operation of appropriate procedures needed to monitor ambient air quality; (3) implementation of a minor source permit program; (4) provisions for the implementation of part C requirements (referred to as “prevention of significant deterioration” or “PSD”); (5) provisions for the implementation of part D requirements for nonattainment new source review (referred to as “part D NNSR,” “NNSR,” “nonattainment NSR,” or “NSR”) permit programs; (6) provisions for air pollution modeling; and (7) provisions for public and local agency participation in planning and emission control rule development.

EPA believes that the section 110(a)(2) elements of the CAA not connected with nonattainment plan submissions and not linked with an area’s attainment status are not applicable requirements for purposes of redesignation. The Areas will still be subject to these requirements after it is redesignated. EPA concludes that section 110(a)(2) of the CAA and part D requirements which are linked with a particular area’s designation and classification are the relevant measures to evaluate in reviewing a redesignation request, and that section 110(a)(2) elements of the CAA not linked in the area’s nonattainment status are not applicable for purposes of redesignation.

This approach is consistent with EPA's existing policy on applicability of conformity (i.e., for redesignations) and oxygenated fuels requirement. See Reading, Pennsylvania, proposed and final rulemakings 61 FR 53174 (October 10, 1996); 62 FR 24826 (May 7, 1997); Cleveland-Akron-Lorain, Ohio final rulemaking 61 FR 20458 (May 7, 1996); and Tampa, Florida final rulemaking 60 FR 62748 (December 7, 1995). See also the discussion on this issue in the Cincinnati, Ohio redesignation 65 FR 37879, 37890 (June 19, 2000) and in the Pittsburgh, Pennsylvania redesignation 66 FR 53099 (October 19, 2001).

EPA has previously approved provisions of Pennsylvania's SIP addressing section 110(a)(2) requirements under section 110(k) of the CAA, including provisions addressing PM<sub>2.5</sub>. See 80 FR 26461 (May 8, 2015). These requirements are, however, statewide requirements that are not linked to the PM<sub>2.5</sub> nonattainment status of the Areas. Therefore, EPA believes that these SIP elements are not applicable requirements for purposes of review of Pennsylvania's PM<sub>2.5</sub> redesignation request.

Since PSD requirements will apply after redesignation, areas being redesignated must have an approved PSD program. Once the Delaware and Lebanon Areas are redesignated to attainment, Pennsylvania's PSD program, and not NNSR, will become effective in the Areas.

Pennsylvania's PSD program, at 25 Pa. Code 127.81 – 127.83, is approved into the Pennsylvania SIP under CCA section 110(k). See 49 FR 33127 (August 21, 1984).

Areas seeking redesignation need not comply with the requirement that a NNSR program be approved prior to redesignation, provided that the area demonstrates maintenance of the NAAQS without NNSR. A more detailed rationale for this is described in the Nichols memorandum.

Nevertheless, Pennsylvania's NNSR program, codified in the Commonwealth's regulations at 25

Pa. Code 127.201 et seq., is approved into the Pennsylvania SIP. See 77 FR 41276 (July 13, 2012).

Section 110(a)(2)(D) of the CAA requires that SIPs contain certain measures to prevent sources in a state from significantly contributing to air quality problems in another state. To implement this provision, EPA has required certain states to establish programs to address the interstate transport of air pollutants in accordance with the NO<sub>x</sub> SIP Call,<sup>1</sup> amendments to the NO<sub>x</sub> SIP Call, May 14, 1999 (64 FR 26298), and March 2, 2000 (65 FR 11222), and the Cross-State Air Pollution Rule (CSAPR)<sup>2</sup> Update, 81 FR 74504 (October 26, 2016). However, a state's requirements under section 110(a)(2)(D) of the CAA are not linked to a particular nonattainment area's designation and classification in that state. The interstate transport SIP submittal requirements, where applicable, continue to apply to a state regardless of the designation of any one particular area in the state. Thus, EPA does not believe that these requirements are applicable requirements for purposes of redesignation. See 65 FR 37890 (June 19, 2000), 66 FR 53094, 53099 (October 19, 2001), and 68 FR 25418, 25426-25427 (May 13, 2003).

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<sup>1</sup> On October 27, 1998 (63 FR 57356), EPA finalized the "Finding of Significant Contribution and Rulemaking for Certain States in the Ozone Transport Assessment Group Region for Purposes of Reducing Regional Transport of Ozone" – commonly called the NO<sub>x</sub> SIP Call. The NO<sub>x</sub> SIP call requires the District of Columbia and 22 states to reduce emissions of NO<sub>x</sub> in order to reduce the transport of ozone and ozone precursors. EPA developed the NO<sub>x</sub> Budget Trading Program, an allowance trading program that states could adopt to meet their obligations under the NO<sub>x</sub> SIP Call. The NO<sub>x</sub> Budget Trading Program allowed electric generating units (EGUs) greater than 25 megawatts and industrial non-electric generating units, such as boilers and turbines, with a rated heat input greater than 250 million British thermal units per hour (MMBtu/hr), referred to as "large non-EGUs," to participate in a regional NO<sub>x</sub> cap and trade program. The NO<sub>x</sub> SIP call also established reduction requirements for other non-EGUs, including cement kilns and stationary internal combustion (IC) engines. NO<sub>x</sub> is a PM<sub>2.5</sub> precursor.

<sup>2</sup> On July 6, 2011, EPA finalized CSAPR, limiting the interstate transport of emissions of nitrogen oxides NO<sub>x</sub> and SO<sub>2</sub> that contribute to harmful levels of PM<sub>2.5</sub> and ozone in downwind states. 76 FR 48208. CSAPR requires 28 states in the eastern United States to reduce SO<sub>2</sub>, annual NO<sub>x</sub> and ozone season NO<sub>x</sub> emissions from fossil fuel-fired power plants that affect the ability of downwind states to attain and maintain compliance with the 1997 and 2006 PM<sub>2.5</sub> NAAQS and the 1997 ozone NAAQS. The CSAPR achieves these reductions through emissions trading programs. For more information on CSAPR, please see the "Permanent and Enforceable Controls Implemented" discussion of in section of IV.C. of this rulemaking.

EPA has reviewed the Pennsylvania SIP and has concluded that it meets the general SIP requirements under section 110(a)(2) of the CAA to the extent they are applicable for purposes of redesignation, namely a SIP-approved PSD program.

**Pennsylvania has met the requirements of subpart 1 of part D.**

Subpart 1 of part D of the CAA sets forth the basic nonattainment plan requirements applicable to PM<sub>2.5</sub> nonattainment areas. Under section 172 of the CAA, states with nonattainment areas must submit plans providing for timely attainment and meet a variety of other requirements.

EPA's longstanding interpretation of the nonattainment planning requirements of section 172 is that once an area is attaining the NAAQS, those requirements are not "applicable" for purposes of section 107(d)(3)(E)(ii) and therefore need not be approved into the SIP before EPA can redesignate the area. In the 1992 General Preamble for Implementation of Title I, EPA set forth its interpretation of applicable requirements for purposes of evaluating redesignation requests when an area is attaining a standard. See 57 FR 13498, 13564 (April 16, 1992). EPA noted that the requirements for RFP and other measures designed to provide for attainment do not apply in evaluating redesignation requests because those nonattainment planning requirements "have no meaning" for an area that has already attained the standard. *Id.* This interpretation was also set forth in the Calcagni memorandum. EPA's understanding of section 172 also forms the basis of its Clean Data Policy, which was articulated with regard to PM<sub>2.5</sub> in 40 CFR 51.1015 and suspends a state's obligation to submit most of the attainment planning requirements that would otherwise apply, including an attainment demonstration and planning SIPs to provide for RFP,

RACM, and contingency measures under section 172(c)(9).<sup>3</sup> Courts have upheld EPA's interpretation of section 172(c)(1)'s "reasonably available" control measures and control technology as meaning only those controls that advance attainment, which precludes the need to require additional measures where an area is already attaining. *NRDC v. EPA*, 571 F.3d 1245, 1252 (D.C. Cir. 2009); *Sierra Club v. EPA*, 294 F.3d 155, 162 (D.C. Cir. 2002); *Sierra Club v. EPA*, 314 F.3d 735, 744 (5th Cir. 2002).

As stated previously, EPA determined that the Delaware and Lebanon Areas have attained the 2012 PM<sub>2.5</sub> NAAQS in "clean data determinations." See 81 FR 89868 (December 13, 2016), 82 FR 8499 (January 26, 2017), and 83 FR 9435 (March 6, 2018). Furthermore, as shown in section IV.A of this rulemaking notice, the Areas continue to attain the 2012 annual PM<sub>2.5</sub> NAAQS. Therefore, because attainment has been reached in the Delaware and Lebanon Areas, no additional measures are needed to provide for attainment, and section 172(c)(1) requirements for an attainment demonstration and RACM are no longer considered to be applicable for purposes of redesignation as long as the Areas continues to attain the standard until redesignation.

Section 172(c)(2)'s requirement that nonattainment plans contain provisions promoting reasonable further progress toward attainment is also not relevant for purposes of redesignation because EPA has determined that the Delaware and Lebanon Areas have monitored attainment of the 2012 annual PM<sub>2.5</sub> NAAQS. In addition, because the Delaware and Lebanon Areas have attained the 2012 annual PM<sub>2.5</sub> NAAQS and are no longer subject to RFP requirements, the requirement to submit the section 172(c)(9) contingency measures is not applicable for purposes

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<sup>3</sup> This regulation was promulgated as part of the 1997 PM<sub>2.5</sub> NAAQS implementation rule that was subsequently challenged and remanded in *NRDC v. EPA*, 706 F.3d 428 (D.C. Cir. 2013), as discussed in Section IV.B of this notice. However, the Clean Data Policy portion of the implementation rule was not at issue in that case.



of redesignation. Section 172(c)(6) requires the SIP to contain control measures necessary to provide for attainment of the NAAQS. Because attainment has been reached, no additional measures are needed to provide for attainment.

Section 172(c)(3) of the CAA requires submission and approval of a comprehensive, accurate and current inventory of actual emissions. The requirement under section 172(c)(3) was not suspended by EPA's clean data determination for the 2012 annual PM<sub>2.5</sub> NAAQS and is the only remaining requirement under section 172 of the CAA to be considered for purposes of redesignation of the Delaware and Lebanon Areas. Pennsylvania submitted 2011 base year emissions inventories for the Delaware and Lebanon Areas for the 2012 annual PM<sub>2.5</sub> NAAQS to EPA as SIP revisions on May 5, 2017 and September 25, 2017, respectively. The inventories cover the general source categories of point sources, nonroad mobile sources, area sources and on-road mobile sources and include emissions of PM<sub>2.5</sub> and its precursors, NO<sub>x</sub>, SO<sub>2</sub>, VOC, and NH<sub>3</sub>. The inventories also included emissions of coarse particulate matter (PM<sub>10</sub>). EPA approved them as revisions to the Pennsylvania SIP, under section 110(k) of the CAA, on July 3, 2018 (83 FR 31064).

Section 172(c)(4) requires the identification and quantification of allowable emissions for major new and modified sources in an area, and section 172(c)(5) requires source permits for the construction and operation of new and modified major stationary sources anywhere in the nonattainment area. As stated previously in this rulemaking action, EPA has determined that, since PSD requirements will apply after redesignation, areas being redesignated need not comply with the requirement that a NNSR program be approved prior to redesignation, provided that the area demonstrates maintenance of the NAAQS without NNSR. A more detailed rationale for

this view is described in the Nichols memorandum. Nevertheless, Pennsylvania's SIP-approved NNSR program is codified in the Commonwealth's regulations at 25 Pa. Code 127.201 et seq. See 77 FR 41276 (July 13, 2012) (approving NNSR program into the SIP). Pennsylvania's PSD program, at 25 Pa. Code 127.81 – 127.83, is also approved into the Pennsylvania SIP. See 49 FR 33127 (August 21, 1984). Once the Delaware and Lebanon Areas are redesignated to attainment, Pennsylvania's PSD program, and not NNSR, will become effective in the Areas.

Section 172(c)(7) of the CAA requires the SIP to meet the applicable provisions of section 110(a)(2) of the CAA. As noted previously, Pennsylvania SIP revisions meet the requirements of section 110(a)(2) of the CAA that are applicable for purposes of redesignation.

Section 175A of the CAA requires a state seeking redesignation to attainment to submit a SIP revision to provide for the maintenance of the NAAQS in the area “for at least 10 years after the redesignation.” In conjunction with its requests to redesignate the Areas to attainment, Pennsylvania submitted SIP revisions to provide for maintenance of the 2012 annual PM<sub>2.5</sub> NAAQS in the Delaware and Lebanon Area for at least 10 years after redesignation, through 2030. Pennsylvania is requesting that EPA approve these SIP revisions as meeting the requirement of section 175A of the CAA. Once approved, the maintenance plan for the Areas will ensure that the SIP for Pennsylvania meets the requirements of the CAA regarding maintenance of the 2012 annual PM<sub>2.5</sub> NAAQS for the Areas. EPA's analysis of the maintenance plan is provided in Section IV.D of this proposed rulemaking action.

Section 176(c) of the CAA requires states to establish criteria and procedures to ensure that Federally supported or funded projects conform to the air quality planning goals in the applicable SIP. The requirement to determine conformity applies to transportation plans, programs, and

projects developed, funded or approved under Title 23 of the United States Code (U.S.C.) and the Federal Transit Act (transportation conformity) as well as to all other Federally supported or funded projects (general conformity). State transportation conformity SIP revisions must be consistent with Federal conformity regulations relating to consultation, enforcement and enforceability, which EPA promulgated pursuant to its authority under the CAA. EPA interprets the conformity SIP requirements<sup>4</sup> as not applicable for purposes of evaluating a redesignation request under section 107(d) because state conformity rules are still required after redesignation and Federal conformity rules apply where state conformity rules have not been approved. See *Wall v. EPA*, 265 F.3d 426 (6th Cir. 2001) (upholding this interpretation); see also 60 FR 62748 (December 7, 1995) (redesignation of Tampa, Florida). Regardless, EPA approved Pennsylvania's transportation conformity SIP requirements on April 29, 2009 (74 FR 19541). EPA concludes that Pennsylvania has met the requirements of subpart 1 of part D relevant for redesignation. Specifically, pursuant to section 110(k) of the CAA, EPA has approved Pennsylvania's base year inventories for the Areas into the Pennsylvania SIP.

**Pennsylvania has met the requirements of subpart 4 of part D.**

A January 4, 2013, U.S. Court of Appeals for the District of Columbia Circuit decision<sup>5</sup> stated that EPA must implement PM<sub>2.5</sub> NAAQS pursuant to subpart 4 of part D of the CAA, which contains provisions specifically concerning PM<sub>10</sub> nonattainment areas. Section 189 in subpart 4 sets out the requirements for PM<sub>10</sub> and PM<sub>2.5</sub> nonattainment areas. Section 189(a) contains the SIP revision requirements for moderate PM<sub>10</sub> and PM<sub>2.5</sub> nonattainment areas, including the

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<sup>4</sup> CAA section 176(c)(4)(E) requires states to submit revisions to their SIPs to reflect certain Federal criteria and procedures for determining transportation conformity. Transportation conformity SIPs are different from SIPs requiring the development of MVEBs, such as control strategy SIPs and maintenance plans.

<sup>5</sup> *Natural Resources Defense Council v. EPA*, 706 F.3d 428 (D.C. Cir. 2013).

requirements for the state to submit an attainment demonstration, RACM (including (RACT) for stationary sources). Section 189(c) contains requirements for RFP, quantitative milestones and quantitative milestone reports.

As with the requirements of section 172(c), explained previously in this proposed rulemaking notice, the requirements of sections 189(a) and 189(c) are no longer considered to be applicable for purposes of redesignation as long as the Areas continue to attain the standard. Because attainment has been reached, no additional measures are needed to provide for attainment.

EPA's clean data determinations for the Delaware and Lebanon Areas suspended the requirements for the state to submit an attainment demonstration, RACM and RACT, RFP, quantitative milestones, and quantitative milestone reports until such time as the Areas are redesignated to attainment, after which such requirements are permanently discharged. See 81 FR 89868 (December 13, 2016), 82 FR 8499 (January 26, 2017, and 83 FR 9435 (March 6, 2018).

EPA concludes that Pennsylvania has met the requirements of subpart 4 of part D relevant for redesignation. Specifically, pursuant to section 110(k) of the CAA, EPA has approved Pennsylvania's base year inventories for the Areas into the Pennsylvania SIP.

**Pennsylvania has a fully approved applicable SIP under section 110(k) of the CAA.**

At various times, Pennsylvania adopted and submitted, and EPA has approved, provisions addressing the various SIP elements applicable for the PM<sub>2.5</sub> NAAQS. EPA may rely on prior SIP approvals in approving a redesignation request (see the Calcagni memorandum at page 3; *Southwestern Pennsylvania Growth Alliance v. Browner*, 144 F.3d 984, 989–990 (6th Cir. 1998); *Wall v. EPA*, 265 F.3d 426 (6<sup>th</sup> Cir. 2001)), plus any additional measures it may approve

in conjunction with a redesignation action (see 68 FR 25418, 25426 (May 12, 2003) and citations therein).

As discussed previously, EPA has fully approved Pennsylvania's SIP for the Delaware and Lebanon Areas under section 110(k) for all requirements applicable under section 110 general SIP requirements, and subparts 1 and 4 of part D for purposes of redesignation under the 2012 annual PM<sub>2.5</sub> NAAQS. EPA has previously approved Pennsylvania's 2011 emissions inventories for the Delaware and Lebanon Areas as meeting the requirement of section 172(c)(3) of the CAA. See 83 FR 31064 (July 3, 2018). EPA also previously approved Pennsylvania's PSD program required under section 110 of the CAA. See 49 FR 33127 (August 21, 1984). No Delaware and Lebanon Areas SIP provisions are currently disapproved, conditionally approved, or partially approved. Therefore, the Administrator has fully approved the applicable requirements for the Delaware and Lebanon Areas under section 110(k) in accordance with section 107(d)(3)(E)(ii).

**C. Are the air quality improvements in the Delaware and Lebanon Areas due to permanent and enforceable emission reductions?**

For redesignating a nonattainment area to attainment, section 107(d)(3)(E)(iii) of the CAA requires EPA to determine that the air quality improvement in the area is due to permanent and enforceable reductions in emissions resulting from implementation of the SIP and applicable Federal air pollution control regulations and other permanent and enforceable reductions.

In making this demonstration for the Delaware and Lebanon Areas, Pennsylvania has calculated the change in emissions of PM<sub>2.5</sub> and its precursors between 2011, which is a year used to designate the Areas as nonattainment (i.e., the base year), and 2014, which is one of the years the

Areas monitored attainment (i.e., the attainment year), as shown in Tables 3 and 4. The reduction in emissions in tons per year (tpy), and the corresponding improvement in air quality from 2011 to 2014 in the Areas can be attributed to a number of regulatory control measures that have been implemented in the Areas and contributing areas in recent years.

**Table 3. 2011 to 2014 Emission Reductions in Delaware County (tpy)**

<b>PM<sub>2.5</sub></b>			
<b>Sector</b>	<b>2011 Base Year</b>	<b>2014 Attainment Year</b>	<b>Difference 2011-2014</b>
Point	1,497	624	873
Area	999	999	0
Onroad	179	136	43
Nonroad	122	97	25
<b>Total</b>	<b>2,797</b>	<b>1856</b>	<b>941</b>
<b>SO<sub>2</sub></b>			
<b>Sector</b>	<b>2011 Base Year</b>	<b>2014 Attainment Year</b>	<b>Difference 2011-2014</b>
Point	4976	1924	3052
Area	2055	708	1347
Onroad	31	31	0
Nonroad	3	2	1
<b>Total</b>	<b>7065</b>	<b>2665</b>	<b>4400</b>
<b>NO<sub>x</sub></b>			
<b>Sector</b>	<b>2011 Base Year</b>	<b>2014 Attainment Year</b>	<b>Difference 2011-2014</b>
Point	7642	5181	2461
Area	2876	2385	491
Onroad	5643	4652	991
Nonroad	1124	783	341
<b>Total</b>	<b>17285</b>	<b>13001</b>	<b>4284</b>

<b>VOC</b>			
<b>Sector</b>	<b>2011 Base Year</b>	<b>2014 Attainment Year</b>	<b>Difference 2011-2014</b>
Point	1393	1410	-17
Area	6779	7396	-617
Onroad	3000	2534	466
Nonroad	1788	1145	643
<b>Total</b>	<b>12960</b>	<b>12485</b>	<b>475</b>
<b>NH<sub>3</sub></b>			
<b>Sector</b>	<b>2011 Base Year</b>	<b>2014 Attainment Year</b>	<b>Difference 2011-2014</b>
Point	218	201	17
Area	206	179	27
Onroad	130	118	12
Nonroad	2	2	0
<b>Total</b>	<b>556</b>	<b>500</b>	<b>56</b>

**Table 4. 2011 to 2014 Emission Reductions in Lebanon County (tpy)**

<b>PM<sub>2.5</sub></b>			
<b>Sector</b>	<b>2011 Base Year</b>	<b>2014 Attainment Year</b>	<b>Difference 2011-2014</b>
Point	81	120	-39
Area	1287	1088	199
Onroad	92	87	5
Nonroad	62	47	15
<b>Total</b>	<b>1522</b>	<b>1342</b>	<b>180</b>
<b>SO<sub>2</sub></b>			
<b>Sector</b>	<b>2011 Base Year</b>	<b>2014 Attainment Year</b>	<b>Difference 2011-2014</b>
Point	278	229	49
Area	374	368	6
Onroad	11	11	0

Nonroad	2	1	1
<b>Total</b>	<b>665</b>	<b>609</b>	<b>56</b>
<b>NOx</b>			
<b>Sector</b>	<b>2011 Base Year</b>	<b>2014 Attainment Year</b>	<b>Difference 2011-2014</b>
Point	690	549	141
Area	869	1258	-389
Onroad	2937	3131	-194
Nonroad	616	505	111
<b>Total</b>	<b>5112</b>	<b>5443</b>	<b>-331</b>
<b>VOC</b>			
<b>Sector</b>	<b>2011 Base Year</b>	<b>2014 Attainment Year</b>	<b>Difference 2011-2014</b>
Point	182	220	-38
Area	5924	6657	-733
Onroad	1332	1183	149
Nonroad	668	316	352
<b>Total</b>	<b>8106</b>	<b>8376</b>	<b>-270</b>
<b>NH<sub>3</sub></b>			
<b>Sector</b>	<b>2011 Base Year</b>	<b>2014 Attainment Year</b>	<b>Difference 2011-2014</b>
Point	17	22	-5
Area	3843	2251	1592
Onroad	49	44	5
Nonroad	1	1	0
<b>Total</b>	<b>3910</b>	<b>2318</b>	<b>1592</b>

In Delaware County, emissions of PM<sub>2.5</sub> and all precursors decreased from 2011 to 2014. In Lebanon County, while emissions of PM<sub>2.5</sub>, SO<sub>2</sub>, and NH<sub>3</sub> decreased, emissions of NOx and VOC increased from the 2011 base year to the 2014 attainment years. However, in Lebanon



County, despite the modest increases in NO<sub>x</sub> and VOC emissions, total emissions of PM<sub>2.5</sub> and its precursors have decreased by over 1200 tpy. Emissions in Delaware County have decreased by over 10,000 tpy in the same time period. The reduction in emissions and the corresponding improvement in air quality over this period can be attributed to a number of regulatory control measures that the Delaware and Lebanon Areas and contributing areas have implemented in recent years, which are described further below.

### **Permanent and Enforceable Controls Implemented**

Reductions in directly emitted fine particles and fine particle precursor emissions have occurred statewide and in upwind areas because of state and Federal emission control measures, with additional emission reductions expected to occur in the future. This section contains a discussion of permanent and enforceable measures that have been implemented in the Delaware and Lebanon Areas.

#### Stationary Source Measures

**NO<sub>x</sub> SIP Call:** On October 27, 1998 (63 FR 57356), EPA issued the NO<sub>x</sub> SIP Call requiring the District of Columbia and 22 states to reduce emissions of NO<sub>x</sub>, a precursor to ozone pollution.<sup>6</sup> Affected states were required to comply with Phase I of the SIP Call beginning in 2004 and Phase II beginning in 2007. Emission reductions resulting from regulations developed in response to the NO<sub>x</sub> SIP Call are permanent and enforceable. By imposing an emissions cap regionally, the NO<sub>x</sub> SIP Call reduced NO<sub>x</sub> emissions from large EGUs and large non-EGUs such as industrial boilers, internal combustion engines, and cement kilns. In response to the NO<sub>x</sub> SIP Call, Pennsylvania adopted its NO<sub>x</sub> Budget Trading Program regulations for EGUs and large

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<sup>6</sup>Although the NO<sub>x</sub> SIP Call was issued in order to address ozone pollution, reductions of NO<sub>x</sub> as a result of that program have also impacted PM<sub>2.5</sub> pollution, for which NO<sub>x</sub> is also a precursor emission.

industrial boilers, with emission reductions starting in May 2003. Pennsylvania's NO<sub>x</sub> Budget Trading Program regulation was approved into the Pennsylvania SIP on August 21, 2001 (66 FR 43795). To meet other requirements of the NO<sub>x</sub> SIP Call, Pennsylvania adopted NO<sub>x</sub> control regulations for cement plants and internal combustion engines, with emission reductions starting in May 2005. These regulations were approved into the Pennsylvania SIP on September 29, 2006 (71 FR 57428).

**Clean Air Interstate Rule (CAIR) and Cross State Air Pollution Rule (CSAPR):** CAIR, which was promulgated on May 12, 2005 (70 FR 25162), and subsequently revised on April 28, 2006, and December 13, 2006, created regional cap-and-trade programs to reduce SO<sub>2</sub> and NO<sub>x</sub> emissions in 28 eastern states, including Pennsylvania. In 2009, the CAIR ozone season NO<sub>x</sub> trading program superseded the NO<sub>x</sub> Budget Trading Program, although the emission reduction obligations of the NO<sub>x</sub> SIP Call were not rescinded. See 40 CFR 51.121(r) and 51.123(aa). On May 23, 2008, Pennsylvania submitted a full CAIR SIP revision to meet the requirements of CAIR. Pennsylvania's CAIR SIP revision addressed all the requirements of CAIR rulemaking and also modified other requirements in Pennsylvania's SIP that interact with CAIR. EPA approved the Commonwealth's CAIR regulation, codified in 25 Pa. Code Chapter 145, Subchapter D, into the Pennsylvania SIP on December 10, 2009 (74 FR 65446). In Pennsylvania's CAIR SIP revision, Pennsylvania terminated its NO<sub>x</sub> Budget Trading Program and transitioned to the Federal CAIR for large electric generating units (EGU).

On July 6, 2011, EPA finalized CSAPR as a replacement for CAIR. CSAPR became effective on January 1, 2015, for SO<sub>2</sub> and annual NO<sub>x</sub>, and May 1, 2015, for ozone season NO<sub>x</sub>. 76 FR 48208. EPA estimated CSAPR will reduce EGU SO<sub>2</sub> emissions by 73% and NO<sub>x</sub> emissions by

54% from 2005 levels in the CSAPR region, which includes Pennsylvania. On September 7, 2016, EPA finalized the CSAPR Update, which reduced Pennsylvania's ozone season NOx trading budget from 51,912 tons to 17,952 tons of ozone season allowances, reduced Pennsylvania's ozone season NOx emissions variability limit from 10,902 tons to 3,770 tons, and reduced Pennsylvania's NOx ozone season new unit set-aside from 1,038 tons to 541 tons. 81 FR 74504 (October 26, 2016).

Because CSAPR is a Federal implementation plan (FIP), states are not required to develop their own CSAPR rules. EPA sets an emissions budget for each of the states covered by CSAPR, including Pennsylvania. Allowances to emit pollution are allocated to affected sources based on each state's emissions budget. The rule provides flexibility to affected sources, allowing sources in each state to determine their own compliance path. This includes adding or operating control technologies, upgrading or improving controls, switching fuels, and using allowances. Sources can buy and sell allowances and bank allowances for future use as long as each source holds enough allowances to account for its emissions by the end of the compliance period.

**NOx Budget Trading Program Limits on Non-EGUs:** Pennsylvania's CAIR SIP revision also established emission limits for the non-EGUs and other units that were subject to the Commonwealth's NOx Budget Trading Program but are not subject to the CAIR NOx Ozone Season Trading Program. These units must continue monitoring NOx emissions and must meet an emissions cap. Pennsylvania's regulation, codified in 25 Pa. Code § 145.8(d), was approved by EPA as a SIP revision on December 10, 2009, and codified at 40 CFR 52.2020(c)(1).

**Cement kilns and large stationary internal combustion engines:** Pennsylvania's CAIR SIP revision also included regulations updating the cement manufacturing and large stationary

internal combustion engine regulations that were adopted pursuant to the NO<sub>x</sub> SIP Call. Until 2009, cement kilns and large stationary internal combustion engines that were subject to the NO<sub>x</sub> SIP Call were required to surrender NO<sub>x</sub> SIP Call allowances if they exceeded their NO<sub>x</sub> emission limits set forth in Pennsylvania's regulations. Because Pennsylvania discontinued the NO<sub>x</sub> Budget Trading Program beginning 2009, at which point NO<sub>x</sub> SIP Call allowances were replaced by CAIR NO<sub>x</sub> ozone season allowances, Pennsylvania modified the regulations to require surrender of CAIR NO<sub>x</sub> ozone season and CAIR NO<sub>x</sub> annual allowances for emission limit exceedances. Pennsylvania's regulations for large stationary internal combustion engines and cement kilns, codified in 25 Pa. Code Chapter 145, Subchapters B and C, respectively, were approved by EPA as a SIP revision on December 10, 2009, and codified at 40 CFR 51.2020(c)(1). An amendment to Pennsylvania's regulation for cement kilns to reduce NO<sub>x</sub> emissions effective April 15, 2011, codified in 25 Pa. Code Chapter 145, Subchapter C, was subsequently approved by EPA as a SIP revision on July 19, 2011, and codified at 40 CFR 51.2020(c)(1).

**Federal Standards for Hazardous Air Pollutants:** As required by the CAA, EPA developed Maximum Available Control Technology (MACT) Standards to regulate emissions of hazardous air pollutants from a published list of industrial sources referred to as "source categories." The MACT standards have been adopted and incorporated by reference in Section 6.6 of Pennsylvania's Air Pollution Control Act and implementing regulations in 25 Pa. Code §127.35 and are also included in Federally enforceable permits issued by PADEP for affected sources.

**NNSR:** Major facilities proposed in Pennsylvania are subject to NNSR requirements in nonattainment areas and PSD requirements in areas of the Commonwealth designated attainment

for NAAQS including carbon monoxide (CO), PM, lead, SO<sub>2</sub>, ozone and nitrogen dioxide (NO<sub>2</sub>). Generally, NSR permit requirements are applicable to a facility located in a nonattainment area for a particular pollutant with a potential to emit 50 tpy or more of VOCs or 100 tpy or more of NO<sub>x</sub>, SO<sub>2</sub>, PM or CO. It should be noted that the entire Commonwealth is included in the Ozone Transport Region pursuant to section 184 of the CAA, and is treated as a moderate ozone nonattainment area, irrespective of the area's attainment status. Any major stationary source or major modification subject to the NSR requirements must receive a plan approval, which requires the source to, among other things, offset its potential to emit air contaminants including NO<sub>x</sub>, PM and VOCs by securing emission reduction credits at the specified offset ratio, employ the "lowest achievable emission rate" (LAER) for each regulated pollutant and conduct an alternative analysis. The nonattainment NSR requirements are codified in 25 Pa. Code chapter 127, subchapter E and approved by EPA as a revision to the Commonwealth's SIP on December 9, 1997 (62 FR 64722), and May 14, 2012 (77 FR 28261). See 40 CFR 52.2020(e)(1).

**PSD:** The PSD program is a pre-construction review and permitting program applicable to new or modified major stationary sources subject to title I, parts C of the CAA. The PSD requirements are applicable to major sources in areas attaining the NAAQS. The Federal PSD regulations codified in 40 CFR Part 52 are incorporated by reference in their entirety in 25 Pa. Code § 127.83. Pennsylvania's PSD regulations, codified in 25 Pa. Code Chapter 127, subchapter D, were approved by EPA on August 21, 1984, and codified at 40 CFR 52.2058 (49 FR 33127). PSD permit requirements may apply to a facility located in an attainment with the potential to emit 100 tpy or 250 tpy of the six criteria pollutants including lead, CO, NO<sub>2</sub>, ozone, PM and SO<sub>2</sub> depending on the source category. Any major stationary source or major modification subject to the PSD requirements must establish the best available control

technology (BACT). In addition, the owner or operator of a facility needs to conduct an ambient air quality analysis, analyze the impacts to soils, vegetation and visibility and make sure that the project will not adversely impact mandatory Federal Class I areas including national parks greater than 6,000 acres and national wilderness areas and national memorial parks greater than 5,000 acres. In addition, pursuant to 25 Pa. Code § 127.1, the emissions of air pollutants from new sources in Pennsylvania must be controlled to the maximum extent, consistent with Best Available Technology (BAT), as determined by the Department as of the date of issuance of the plan approval for the new source. PADEP determines BAT requirements on a case-by-case basis for both major and minor stationary sources considering energy, environmental benefits and costs. Under 25 Pa. Code § 127.12(a)(5), an application for a plan approval must show that the emissions from a new source will be the minimum attainable through the use of BAT.

Pennsylvania regulations define “best available technology” in 25 Pa. Code § 121.1 as, “Equipment, devices, methods or techniques as determined by the Department which will prevent, reduce or control emissions of air contaminants to the maximum degree possible and which are available or may be made available.” PADEP’s BAT regulations, codified in 25 Pa. Code §§ 127.1 and 127.12(a)(5), were approved by EPA on July 30, 1996 (61 FR 39594).

#### **Sunoco Marcus Hook Shutdown - Delaware County only**

In addition to the stationary, mobile, nonroad, and area emissions control measures list in this section, emissions in Delaware County were reduced as a result of the permanent shutdown of the largest emitting point source in the county. The Sunoco, Inc. Marcus Hook Refinery facility, located three miles southwest of the Chester monitoring site, shut down and permanently ceased all crude petroleum refining operations, effective December 31, 2011. In the Delaware County redesignation request, Pennsylvania reports that, due to this permanent shutdown of the refining

operations, emissions from the facility were reduced by more than 4,500 tons (2044 tpy oxides of sulfur, 1490 oxides of nitrogen, 674 tpy PM<sub>2.5</sub>, 320 tpy VOC, and 3 tpy NH<sub>3</sub>) from the 2011 base year.

### Mobile Sources

#### **Federal Motor Vehicle Control Programs (FMVCP) and Pennsylvania Clean Vehicles**

##### **Program for Passenger Vehicles and Light-Duty Trucks and Cleaner Gasoline: Tier 1**

tailpipe standards established by the CAA Amendments of 1990, under section 202(g) of the CAA, include NO<sub>x</sub> and VOC limits for light-duty gasoline vehicles and light-duty gasoline trucks. In 1994, these standards began to be phased in. Evaporative VOC emissions were reduced in gasoline-powered cars starting with Model Year (MY) 1998. In 1998, Pennsylvania adopted the Pennsylvania Clean Vehicles Program, which incorporates by reference certain California Low Emission Vehicle (CA LEV) emission standards for passenger cars and light-duty trucks. As required under section 177 of the CAA, these provisions are identical to the low emission standards adopted by California. The Pennsylvania Clean Vehicles Program does not incorporate by reference the California zero emissions vehicle (ZEV) or emissions control warranty systems statement provisions. In the same rulemaking, Pennsylvania adopted the National Low Emission Vehicle (NLEV) program as a compliance alternative to the Pennsylvania Clean Vehicles Program. The NLEV program became effective in the Ozone Transport Region (OTR) in 1999. Pennsylvania's New Motor Vehicle Emissions Control Program regulations allowed automobile manufacturers to comply with NLEV instead of the CA LEV program through MY 2005. These regulations affected vehicles 6,000 pounds and less. Pennsylvania's New Motor Vehicle Emissions Control Program regulations, which include the

Pennsylvania Clean Vehicles Program, are codified in 25 Pa. Code §§ 126.401-126.441, and are approved into the Pennsylvania SIP. See 77 FR 3386 (January 24, 2012).

In 1999, EPA promulgated regulations more stringent than NLEV (Tier 2), starting with model year (MY) 2004. The NLEV program was replaced for MY 2004 and later by the more stringent Federal Tier 2 vehicle emissions regulations (65 FR 6698, February 10, 2000), and vehicle manufacturers operating under the NLEV program became subject to the Tier 2 requirements. Pennsylvania amended the former New Motor Vehicle Emissions Control Program in 2006. The Clean Vehicles Program continues to incorporate the CALEV program by reference. As amended, the program affects MY 2008 and newer passenger cars and light-duty trucks. EPA approved Pennsylvania's Clean Vehicles Program as a revision to the Commonwealth's SIP on January 24, 2012 (77 FR 3386).

**Heavy-Duty Diesel Control Programs:** On January 18, 2001, EPA promulgated regulations for heavy-duty engines and vehicles (over 14,000 pounds) starting with MY 2004. 66 FR 5002. In 2002, Pennsylvania adopted the Heavy-Duty Diesel Emissions Control Program for model years starting after May 2004. The program incorporates California standards by reference and requires MY 2005 and subsequent new heavy-duty diesel highway engines to be those certified by California. On October 6, 2000, EPA adopted new emission standards for heavy-duty engines and vehicles for MY 2007 and subsequent years. 65 FR 59896. For diesel engines, the standards were phased in from 2007 to 2010 for NO<sub>x</sub> and VOCs. For gasoline engines, the standards were phased in during MY 2008 and 2009. Federal and California standards are virtually identical for MY 2007. For MY 2008, California adopted requirements for idling restriction engine programming and an optional "clean NO<sub>x</sub> idle" standard. Because the new



engine standards are adversely affected by sulfur in fuel, EPA also required most highway diesel fuel to contain no more than 15 parts per million (ppm) of sulfur, beginning in the fall of 2006. In addition, Federal heavy-duty greenhouse gas standards (76 FR 57106, September 15, 2011), which began phasing in with the MY 2014, will result in decreased energy consumption rates and decreased refueling emissions.

**Vehicle Emission Inspection/Maintenance Program:** In early 2004, Pennsylvania expanded its Vehicle Emission Inspection/Maintenance (I/M) Program. Delaware County falls under Pennsylvania's "Philadelphia" program (which also includes Bucks, Chester, Montgomery and Philadelphia Counties), while Lebanon County falls under Pennsylvania's "South Central Region" program (which also includes Berks, Cumberland, Dauphin, Lancaster, Lehigh, Northampton, and York Counties). Both programs apply to gasoline-powered vehicles 9,000 pounds and under, MY 1975 and newer. For vehicles MY 1996 and newer, the programs consist of an annual on-board diagnostic test and a gas cap pressure test. For subject vehicles MY 1995 and older, the programs consist of an annual visual inspection of pollution control devices to ensure they are present, connected and the proper type for the vehicle, as well as a gas cap pressure test. In addition, the Philadelphia area program requires dynamometer testing on certain MY 1995 and older vehicles. However, the dynamometer testing is being phased out, with the vehicles dropping out each year. By 2021, the dynamometer testing will be completely phased out for all vehicles MY 1995 and older, and these vehicles will receive the same tests as in the South Central Region program. These regulations can be found in 67 Pa. Code Chapter 177. Pennsylvania submitted the expanded emissions program to EPA as a SIP revision on December 1, 2003. EPA approved the SIP revision on October 6, 2005 (70 FR 58313).

**Low Sulfur Gasoline:** The 1999 Federal Tier 2 regulations (65 FR 6698, February 10, 2000) reduced the sulfur content of gasoline by up to 90 percent, enabling the use of new emission control technologies in cars and trucks that reduce harmful air pollution. Requirements for use of low-sulfur gasoline enabled use of advanced emission control systems in light-duty vehicles beginning in MY 2004. Vehicles meeting Tier 2 emission standards are 77 to 95 percent cleaner than earlier models. On April 28, 2014, EPA promulgated a regulation adopting more stringent vehicle standards and reducing sulfur limits in gasoline further with the Tier 3 Motor Vehicle Emission and Fuel Standards program (79 FR 23414). The rule was effective on June 27, 2014. The Tier 3 program requires the annual average content of sulfur in gasoline to be reduced to 10 ppm, effective January 1, 2017. By 2030, when fully implemented, this program will increase the effectiveness of vehicle emission controls even further and reduce onroad emissions of NO<sub>x</sub> by 25 percent, direct particulate matter by 10 percent and VOCs by 16 percent. The rule will also significantly reduce emissions of carbon monoxide and hazardous air pollutants including acrolein, benzene, formaldehyde and acetaldehyde.

#### Nonroad Sources

EPA has adopted a series of regulations affecting new diesel-powered (compression ignition) and gasoline-powered (spark ignition) nonroad engines of various sizes and applications. On June 29, 2004, EPA adopted a rule establishing a comprehensive national program to reduce emissions from nonroad diesel engines (69 FR 38958). The rule phased in requirements for reducing the sulfur content of diesel used in nonroad diesel engines. The reduction in fuel sulfur content prevents damage to the more advanced emission control systems needed to meet the engine standards; it will also reduce fine particulate emissions from diesel engines. In 2007, fuel sulfur levels were limited to 500 ppm for nonroad applications other than ocean-going marine

vessels. In 2010, fuel sulfur levels were reduced to the same sulfur concentration as in highway fuel, 15 ppm; effective in 2012 to locomotive and marine diesel fuel. See 70 FR 70498 (November 22, 2015) and 71 FR 25706 (May 1, 2006). On April 30, 2010, EPA adopted changes to the nonroad diesel fuel program to allow for the production and sale of diesel fuel with up to 1,000 ppm sulfur for use in Category 3 marine vessels. 75 FR 22896

#### Area Sources

**Low Sulfur Fuel Oil:** Pennsylvania's low sulfur fuel rule limits the sulfur content of No. 2 fuel oil to 500 ppm, No. 4 fuel oil to 2,500 ppm and Nos. 5 and 6 fuel oils to 5,000 ppm. Compliance with the lower sulfur content limits began on July 1, 2016. Pennsylvania estimated statewide SO<sub>2</sub> emission reductions of approximately 21,000 tons per year from this rule. These emission reductions will allow the Commonwealth to attain and maintain the PM<sub>2.5</sub> standards and improve visibility. The final-form regulation was submitted to EPA for approval as a SIP revision on February 26, 2013. EPA approved this rule into Pennsylvania's SIP on July 10, 2014 (79 FR 39330).

**Consumer Products:** Pennsylvania's statewide regulation applies to any person who sells, supplies, offers for sale, or manufactures certain consumer products on or after January 1, 2005, for use in the Commonwealth. The Consumer Products program is codified in 25 Pa. Code Chapter 130, Subchapter B. It was submitted to EPA as a SIP revision on March 26, 2003 and approved on December 8, 2004 (69 FR 70895). Amendments to the Consumer Products regulations were adopted on October 11, 2008, submitted to EPA as a SIP revision on March 11, 2009, and approved on October 18, 2010 (75 FR 63717).

**Adhesives, Sealants, Primers and Solvents:** Pennsylvania adopted a regulation in 2010 to control VOC emissions from adhesives, sealants, primers and solvents. EPA approved this regulation as a SIP revision on September 26, 2012 (77 FR 59090).

**Conclusion:** EPA has reviewed this suite of measures and the emission reductions achieved in the Delaware and Lebanon Areas between 2011 and 2014 (summarized in Table 3 and 4) and determined that the Areas did attain the 2012 annual PM<sub>2.5</sub> NAAQS due to permanent and enforceable measures.

**D. Does Pennsylvania have fully approvable maintenance plans for the Delaware and Lebanon Areas?**

In conjunction with Pennsylvania's requests to redesignate the Delaware and Lebanon Areas to attainment, Pennsylvania submitted SIP revisions to provide for maintenance of the 2012 annual PM<sub>2.5</sub> NAAQS in the Areas through 2030. EPA is proposing to approve Pennsylvania's maintenance plans in this rulemaking action. If this proposed action is finalized, the Areas will have approved maintenance plans.

Maintenance Plan Requirements

Section 175A of the CAA sets forth the required elements of a maintenance plan for areas seeking redesignation from nonattainment to attainment. Under section 175A, the plan must demonstrate continued attainment of the applicable NAAQS for at least ten years after EPA approves a redesignation to attainment. Eight years after redesignation, the state must submit a revised maintenance plan which demonstrates that attainment will continue to be maintained for ten years following the initial 10-year maintenance period. To address the possibility of future NAAQS violations, the maintenance plan must contain contingency measures with a schedule

for implementation as EPA deems necessary to assure prompt correction of any future PM<sub>2.5</sub> NAAQS violations.

The Calcagni memorandum provides additional guidance on the content of a maintenance plan. It states that a maintenance plan should address the following items: The attainment emissions inventory, a maintenance demonstration showing maintenance for the 10 years of the maintenance period, a commitment to maintain the existing monitoring network, factors and procedures to be used for verification of continued attainment of the NAAQS, and a contingency plan to prevent or correct future violations of the NAAQS.

As discussed in detail in the following section, Pennsylvania's maintenance plan submissions document that the Delaware and Lebanon Areas' emissions inventories show that the areas will remain below the attainment year inventories through 2030, more than ten years after redesignation.

#### Attainment Inventory

The Calcagni memorandum indicates that states requesting redesignation to attainment should develop an attainment emissions inventory in order to identify the level of emissions in the area that is sufficient to attain the NAAQS. The attainment inventory should be consistent with EPA's most recent guidance on emission inventories for nonattainment areas available at the time and should include the emissions during the time period associated with monitoring data showing attainment.

Pennsylvania developed attainment year emissions inventories for the Delaware and Lebanon Areas for 2014, one of the years in the period during which the Areas first monitored attainment

of the 2012 annual PM<sub>2.5</sub> NAAQS. The attainment year inventories include emissions of PM<sub>2.5</sub> NO<sub>x</sub>, SO<sub>2</sub>, VOC, NH<sub>3</sub>, and PM<sub>10</sub>. The attainment levels of emissions are summarized in Tables 5 and 6, along with future maintenance projections. Note that these tables do not include emissions of PM<sub>10</sub>, as it is not a precursor to PM<sub>2.5</sub>.

**Table 5. Delaware County Emissions Inventory Maintenance Demonstration (tpy)**

<b>PM<sub>2.5</sub></b>					
<b>Sector</b>	<b>2014 Attainment</b>	<b>2022 Interim</b>	<b>2030 Maintenance</b>	<b>Difference 2014-2022</b>	<b>Difference 2014-2030</b>
Point	624	635	684	-11	-60
Area	999	1030	1050	-31	-51
Onroad	136	79	53	57	83
Nonroad	97	74	66	23	31
<b>Total</b>	<b>1856</b>	<b>1818</b>	<b>1853</b>	<b>38</b>	<b>3</b>
<b>SO<sub>2</sub></b>					
<b>Sector</b>	<b>2014 Attainment</b>	<b>2022 Interim</b>	<b>2030 Maintenance</b>	<b>Difference 2014-2022</b>	<b>Difference 2014-2030</b>
Point	1924	1896	1896	28	28
Area	708	194	164	514	544
Onroad	31	11	10	20	21
Nonroad	2	1	1	1	1
<b>Total</b>	<b>2665</b>	<b>2102</b>	<b>2071</b>	<b>563</b>	<b>594</b>
<b>NO<sub>x</sub></b>					
<b>Sector</b>	<b>2014 Attainment</b>	<b>2022 Interim</b>	<b>2030 Maintenance</b>	<b>Difference 2014-2022</b>	<b>Difference 2014-2030</b>
Point	5181	5690	5784	-509	-603
Area	2385	2110	2008	275	377
Onroad	4652	2016	956	2636	3696
Nonroad	783	524	459	259	324
<b>Total</b>	<b>13001</b>	<b>10340</b>	<b>9207</b>	<b>2661</b>	<b>3794</b>
<b>VOC</b>					

Sector	2014 Attainment	2022 Interim	2030 Maintenance	Difference 2014-2022	Difference 2014-2030
Point	1410	1501	1508	-91	-98
Area	7396	7393	7421	3	-25
Onroad	2534	1354	816	1180	1718
Nonroad	1145	953	943	192	202
<b>Total</b>	<b>12485</b>	<b>11201</b>	<b>10688</b>	<b>1284</b>	<b>1797</b>
<b>NH<sub>3</sub></b>					
Sector	2014 Attainment	2022 Interim	2030 Maintenance	Difference 2014-2022	Difference 2014-2030
Point	201	165	171	36	30
Area	179	157	153	22	26
Onroad	118	89	88	29	30
Nonroad	2	2	2	0	0
<b>Total</b>	<b>500</b>	<b>413</b>	<b>414</b>	<b>87</b>	<b>86</b>

**Table 6. Lebanon County Emissions Inventory Maintenance Demonstration (tpy)**

<b>PM<sub>2.5</sub></b>					
Sector	2014 Attainment	2022 Interim	2030 Maintenance	Difference 2014-2022	Difference 2014-2030
Point	120	154	178	-34	-58
Area	1088	1016	1024	72	64
Onroad	87	50	31	37	56
Nonroad	47	29	19	18	28
<b>Total</b>	<b>1342</b>	<b>1249</b>	<b>1252</b>	<b>93</b>	<b>90</b>
<b>SO<sub>2</sub></b>					
Sector	2014 Attainment	2022 Interim	2030 Maintenance	Difference 2014-2022	Difference 2014-2030
Point	229	235	238	-6	-9
Area	368	80	69	288	299
Onroad	11	6	6	5	5
Nonroad	1	1	1	0	0

<b>Total</b>	<b>609</b>	<b>322</b>	<b>314</b>	<b>287</b>	<b>295</b>
<b>NOx</b>					
<b>Sector</b>	<b>2014 Attainment</b>	<b>2022 Interim</b>	<b>2030 Maintenance</b>	<b>Difference 2014-2022</b>	<b>Difference 2014-2030</b>
Point	549	637	718	-88	-169
Area	1258	1132	1057	126	201
Onroad	3131	1867	1374	1264	1757
Nonroad	505	305	214	200	291
<b>Total</b>	<b>5443</b>	<b>3941</b>	<b>3363</b>	<b>1502</b>	<b>2080</b>
<b>VOC</b>					
<b>Sector</b>	<b>2014 Attainment</b>	<b>2022 Interim</b>	<b>2030 Maintenance</b>	<b>Difference 2014-2022</b>	<b>Difference 2014-2030</b>
Point	220	226	229	-6	-9
Area	6657	6660	6681	-3	-24
Onroad	1183	644	411	539	772
Nonroad	316	238	226	78	90
<b>Total</b>	<b>8376</b>	<b>7768</b>	<b>7547</b>	<b>608</b>	<b>829</b>
<b>NH<sub>3</sub></b>					
<b>Sector</b>	<b>2014 Attainment</b>	<b>2022 Interim</b>	<b>2030 Maintenance</b>	<b>Difference 2014-2022</b>	<b>Difference 2014-2030</b>
Point	22	29	33	-7	-11
Area	2251	2336	2334	-85	-83
Onroad	44	35	35	9	9
Nonroad	1	1	1	0	0
<b>Total</b>	<b>2318</b>	<b>2401</b>	<b>2403</b>	<b>-83</b>	<b>-85</b>

#### Maintenance Demonstration

As discussed previously in this notice, EPA has determined that the Delaware and Lebanon Areas are attaining the 2012 annual PM<sub>2.5</sub> NAAQS based on monitoring data for the 3-year



period from 2015-2017. In its maintenance plans, Pennsylvania demonstrates maintenance by showing that emissions projected over the maintenance period for the Areas will not exceed emissions levels that were present when the Areas came into attainment of the 2012 annual PM<sub>2.5</sub> NAAQS. Pennsylvania selected 2014 as the attainment emission inventory year for the Delaware and Lebanon Areas. The attainment inventories identify the level of emissions in the Delaware and Lebanon Areas that is sufficient to attain the 2012 annual PM<sub>2.5</sub> NAAQS. Pennsylvania has previously submitted 2011 base year emission inventories for the Delaware and Lebanon Areas, which EPA approved into the Pennsylvania SIP. See 83 FR 31064. In its maintenance demonstrations for the Delaware and Lebanon Areas, Pennsylvania projected emissions forward to 2022 and 2030, which satisfies the 10-year interval required in section 175(A) of the CAA.

The emissions inventories address four major types of sources: point, area, on-road mobile, and non-road mobile. The future year emissions inventories have been estimated using projected rates of growth in population, traffic, economic activity, expected control programs, and other parameters. Non-road mobile emissions estimates, with the exception of the railroad locomotives, commercial marine, and aircraft emissions, were developed using EPA's NONROAD component of EPA's Motor Vehicle Emissions Simulator (MOVES) model version 2014b. On-road mobile source emissions were calculated using EPA's MOVES2014a on-road mobile emission model.

EPA has reviewed Pennsylvania's emissions inventories for the Delaware and Lebanon Areas and determined that Pennsylvania developed them consistent with EPA guidance. EPA's evaluation of the 2014 attainment inventories and 2020 and 2030 projected inventories can be

found EPA's technical support documents (TSDs) prepared for the Delaware and Lebanon Areas, which are available online at <http://www.regulations.gov>, Docket ID: EPA-R03-OAR-2019-0262.

Section 175A requires a state seeking redesignation to attainment to submit a SIP revision to provide for the maintenance of the NAAQS in the area "for at least 10 years after the redesignation." EPA has interpreted this as a showing of maintenance "for a period of ten years following redesignation." (Calcagni memorandum, p. 9). Where the emissions inventory method of showing maintenance is used, the purpose is to show that emissions during the maintenance period will not increase over the attainment year inventory. (Calcagni memorandum, pp. 9-10). Pennsylvania's maintenance plan submissions expressly document that the Delaware and Lebanon Areas overall emissions inventories will remain well below the attainment year inventories through 2030. In addition, EPA believes that the Delaware and Lebanon Areas will continue to maintain the 2012 annual PM<sub>2.5</sub> NAAQS through 2030. Thus, if EPA finalizes its proposed approval of the redesignation request and maintenance plan, the approval will be based upon this showing, in accordance with section 175A, and EPA's analysis described herein, that the Delaware and Lebanon Areas' maintenance plans provide for maintenance for at least ten years after redesignation.

The maintenance plans for the Delaware and Lebanon Areas for the 2012 annual PM<sub>2.5</sub> NAAQS include a maintenance demonstration that:

(1) Shows compliance with and maintenance of the annual PM<sub>2.5</sub> NAAQS by providing information to support the demonstration that current and future emissions of PM<sub>2.5</sub> and PM<sub>2.5</sub> precursors remain at or below 2014 attainment year emissions levels.

(2) Uses 2014 as the attainment year and includes future emission inventory projections for 2022 and 2030.

(3) Identifies an “out year” at least 10 years after EPA review and potential approval of the maintenance plan. Per 40 CFR part 93, PM<sub>2.5</sub> and NO<sub>x</sub> MVEBs were established for the last year (2030) of the maintenance plan.

(iv) Provides, as shown in Tables 5 and 6, the estimated and projected emissions inventories, in tons per year (tpy), for the Delaware and Lebanon Area, for PM<sub>2.5</sub>, NO<sub>x</sub>, SO<sub>2</sub>, VOC, and NH<sub>3</sub>.

For maintenance of the 2012 PM<sub>2.5</sub> NAAQS, Pennsylvania relies on the same suite of permanent and enforceable stationary, mobile, nonroad, and area source measures as set out in the redesignation requests for the Areas. As shown in Table 5, Pennsylvania projects that emissions of PM<sub>2.5</sub> and all its precursors will be below the 2014 attainment year emissions through 2030 in Delaware County. Table 6 shows that PM<sub>2.5</sub> and all its precursors except NH<sub>3</sub> will be below the 2014 attainment year emissions through 2030 in Lebanon County. Although there is a slight increase in the NH<sub>3</sub> between 2014 and 2030 (85 tpy or 4%), NH<sub>3</sub> emissions are significantly lower than they were in the 2011 base year (3,910 tpy). Furthermore, in Lebanon County emission reductions of PM<sub>2.5</sub> and the other precursors far outweighs the slight increase in NH<sub>3</sub> emissions.

#### Monitoring Networks

In the maintenance plans, Pennsylvania committed to continue to operate the air monitoring network in accordance with 40 CFR Part 58 to verify the attainment status of the Delaware and Lebanon Areas for the 2012 annual PM<sub>2.5</sub> NAAQS, with no reductions in the number of sites from those in the existing network unless pre-approved by EPA.

### Verification of Continued Attainment

Pennsylvania remains obligated to continue to quality-assure monitoring data and enter all data into the Air Quality System in accordance with Federal guidelines. In the maintenance plans, Pennsylvania committed to track the attainment status of the 2012 annual PM<sub>2.5</sub> NAAQS in the Delaware and Lebanon Areas by reviewing air quality and emissions data during the maintenance period. Pennsylvania will perform an annual evaluation of two key factors, vehicle miles traveled (VMT) data and emissions reported from stationary sources and compare them to the assumptions about these factors used in the maintenance plans. Pennsylvania will also evaluate the periodic (every three years) emission inventories prepared under EPA's Air Emission Reporting Requirements (40 CFR Part 51, Subpart A) to determine if they exceed the attainment year inventory (2014) by more than 10 percent. Based on these evaluations, Pennsylvania will consider whether any further emission control measures should be implemented.

### Contingency Plan

Contingency plan provisions are designed to promptly correct or prevent a violation of the NAAQS that might occur after redesignation of an area to attainment. Section 175A of the CAA requires that a maintenance plan include such contingency measures as EPA deems necessary to assure that the state will promptly correct a violation of the NAAQS that occurs after redesignation. The maintenance plan should identify the contingency measures to be adopted, a schedule and procedure for adoption and implementation of the contingency measures, and a time limit for action by the state. The state should also identify specific indicators to be used to determine when the contingency measures need to be adopted and implemented. The

maintenance plan must include a requirement that the state will implement all pollution control measures that were contained in the SIP before redesignation of the area to attainment.

See section 175A(d) of the CAA.

In the maintenance plans for the Delaware and Lebanon Areas, Pennsylvania commits to continue to implement all applicable requirements which were contained in the SIP for the Areas before redesignation, even after EPA approval of Pennsylvania's requests for the Areas to be redesignated to attainment. Additionally, Pennsylvania commits to adopt and expeditiously implement corrective actions, as necessary and appropriate, if contingency measures are triggered. Pennsylvania's contingency plans for Delaware and Lebanon Areas define warning level and action level responses.

The maintenance plans for the Areas state that a first-level warning response will be triggered if the annual mean PM<sub>2.5</sub> concentration exceeds 12.5 µg/m<sup>3</sup> in a single calendar year at any monitor within one of the Areas or if the periodic emissions inventory for one of the Areas exceeds the 2014 attainment year inventory by more than 10 percent. The first-level response will consist of a study to determine whether the triggers indicate a trend toward higher PM<sub>2.5</sub> values in the affected area and whether emissions of PM<sub>2.5</sub> and its precursors appear to be increasing. If there appears to be an increasing trend, the study will evaluate whether the trend is likely to continue and, if so, the necessary and appropriate control measures to reverse the trend. Implementation of necessary and appropriate controls would take place as expeditiously as possible.

The maintenance plans for the Areas explain that a second-level warning response will be prompted if the 2-year average of the annual mean PM<sub>2.5</sub> concentrations exceeds 12.0 µg/m<sup>3</sup> at any monitor within one of the Areas. If this occurs, Pennsylvania will evaluate the conditions

leading to the PM<sub>2.5</sub> levels and evaluate what measures might be most effective in correcting the PM<sub>2.5</sub> levels. Pennsylvania will also analyze the potential emissions effects of Federal, state and local measures that have been adopted but not yet implemented at the time the second-level response is triggered. Pennsylvania will begin the process of adopting selected measures that are necessary and appropriate so that, in the event of a violation (action level trigger), the measures can be implemented as expeditiously as practicable.

The maintenance plans for the Areas define an action level response as being triggered if a violation of the PM<sub>2.5</sub> NAAQS occurs. If triggered, Pennsylvania will initiate the rulemaking process to adopt and implement contingency measures to return the area to attainment of the 2012 annual PM<sub>2.5</sub> NAAQS. The maintenance plans set out the following criteria for selecting contingency measures: air quality analysis indicating the nature of the violation; emission reduction potential; timeliness of implementation; and costs, equity and cost-effectiveness. The maintenance plans set time frames for adoption and implementation of the contingency measures, which provides for full adoption of measures within approximately 24 months of a confirmed violation, considering all the steps in Pennsylvania's regulatory adoption process. The contingency measures Pennsylvania would consider promulgating if a violation of the 2012 annual PM<sub>2.5</sub> NAAQS occurs in one of the Areas include the following regulatory and nonregulatory measures as listed in Table 7.

**Table 7. Contingency Measures for the Delaware and Lebanon Areas**

<b>Measure Type</b>	<b>Contingency Measure</b>
Regulatory measures	A regulation to reduce emissions on high-electric demand days (Delaware County only).
	A regulation to lower the sulfur content of No. 2 fuel oil from 500 to 15 ppm.
	Other regulatory measures identified based on the selection criteria set out in the contingency plans.

Non-regulatory measures	Voluntary diesel projects: <ul style="list-style-type: none"> <li>- Diesel retrofit (including replacement, repowering or alternative fuel use) for public or private local onroad or off-road fleets;</li> <li>- Idling reduction technology for Class 2 - yard locomotives; and</li> <li>- Idling reduction technologies or strategies for truck stops, warehouses and other freight-handling facilities.</li> </ul>
	Promotion of accelerated turnover of lawn and garden equipment, especially commercial equipment.
	Additional promotion of alternative fuels for fleets, home heating and agricultural use.

**Conclusion:** EPA has reviewed Pennsylvania's maintenance plans for Delaware and Lebanon Areas and determined that they meet the requirements of CAA section 175A. The plans demonstrate continued attainment of the 2012 annual PM<sub>2.5</sub> NAAQS for at least ten years after EPA approves a redesignation to attainment and they contain adequate contingency measures to address the possibility of future NAAQS violations. Therefore, EPA is proposing to approve the maintenance plans.

## **V. Has Pennsylvania adopted approvable motor vehicle emission budgets?**

### **A. What are the motor vehicle emissions budgets (MVEB)?**

Under the CAA, states are required to submit, at various times, control strategy SIPs and maintenance plans in ozone areas. These control strategy SIPs (*i.e.*, RFP, SIPs and attainment demonstration SIPs) and maintenance plans identify and establish MVEBs for certain criteria pollutants and/or their precursors to address pollution from on-road mobile sources. In the maintenance plan, the MVEBs are termed "on road-mobile source emission budgets." Pursuant to 40 CFR part 93 and §51.112, MVEBs must be established in a PM<sub>2.5</sub> maintenance plan. An MVEB is the portion of the total allowable emissions that is allocated to highway and transit vehicle use and emissions. An MVEB serves as a ceiling on emissions from an area's planned transportation system. The MVEB concept is further explained in the preamble to the November

24, 1993 Transportation Conformity Rule (58 FR 62188). The preamble also describes how to establish and revise the MVEBs in control strategy SIPs and maintenance plans.

Transportation conformity is required under section 176(c) of the CAA to ensure that Federally supported highway and transit projects, and other activities are consistent with (conform to) the purpose of the SIP. The CAA requires Federal actions in nonattainment and maintenance areas to “conform to” the goals of the SIP. This means that such actions will not cause or contribute to violations of a NAAQS; worsen the severity of an existing violation; or delay timely attainment of any NAAQS or any interim milestone. Actions involving the Federal Highway

Administration (FHWA) or Federal Transit Administration (FTA) funding or approval are subject to the Transportation Conformity Rule (40 CFR part 93, subpart A). Under this rule, metropolitan planning organizations (MPOs) in nonattainment and maintenance areas coordinate with state air quality and transportation agencies, EPA, FHWA, and FTA to demonstrate that their metropolitan transportation plans and transportation improvement plans (TIPs) conform to applicable SIPs. This is typically determined by showing that estimated emissions from existing and planned highway and transit systems are less than or equal to the MVEBs contained in a SIP.

When reviewing submitted “control strategy” SIPs or maintenance plans containing MVEBs, EPA must affirmatively find the MVEBs contained therein “adequate” for use in determining transportation conformity. After EPA affirmatively finds the submitted MVEBs are adequate for transportation conformity purposes, the MVEBs can be used by state and Federal agencies in determining whether proposed transportation projects “conform” to the SIP as required by section 176(c) of the CAA. EPA's substantive criteria for determining “adequacy” of a MVEB are set out in 40 CFR 93.118(e)(4).



EPA's process for determining “adequacy” consists of three basic steps: public notification of a SIP submission, a public comment period, and EPA's adequacy finding. This process for determining the adequacy of submitted SIP MVEBs was initially outlined in EPA's May 14, 1999 guidance, “Conformity Guidance on Implementation of March 2, 1999, Conformity Court Decision.” This guidance was finalized in the Transportation Conformity Rule Amendments for the “New 8-Hour Ozone and PM<sub>2.5</sub> National Ambient Air Quality Standards and Miscellaneous Revisions for Existing Areas; Transportation Conformity Rule Amendments—Response to Court Decision and Additional Rule Change” on July 1, 2004 (69 FR 40004). EPA consults this guidance and follows this rulemaking in making its adequacy determinations.

The maintenance plans submitted by PADEP for the Delaware and Lebanon Areas identify the NO<sub>x</sub> and PM<sub>2.5</sub> MVEBs for transportation conformity purposes for the years 2014, 2022, and 2030. These MVEBs (including safety margins) are the projected emissions for the on-road mobile sources plus any portion of the safety margin allocated to the MVEBs (safety margin allocation for 2022 and 2030 only). These emission budgets, when approved by EPA, must be used for transportation conformity determinations. The MVEBs for the Delaware and Lebanon Areas are displayed in Tables 8 and 9.

**Table 8. On-Road MVEBs Contained in the Delaware County, PA 2012 PM<sub>2.5</sub> Nonattainment Area Maintenance Plan**

<b>Delaware County, PA</b>	<b>Motor Vehicle Emissions Budget for PM<sub>2.5</sub> On-Road Emissions (tpy)</b>	<b>Mobile Vehicle Emissions Budget for NO<sub>x</sub> On-Road Emissions (tpy)</b>
<b>2014</b>	<b>136</b>	<b>4,652</b>
2022 Predicted	75	1,833
Safety Margin	4	183
<b>2022 Budget</b>	<b>79</b>	<b>2,016</b>
2030 Predicted	53	869

Safety Margin	0	87
<b>2030 Budget</b>	<b>53</b>	<b>956</b>

**Table 9. On-Road MVEBs Contained in the Lebanon County, PA 2012 PM<sub>2.5</sub> Nonattainment Area Maintenance Plan**

Lebanon County, PA	Motor Vehicle Emissions Budget for PM <sub>2.5</sub> On-Road Emissions (tpy)	Mobile Vehicle Emissions Budget for NO <sub>x</sub> On-Road Emissions (tpy)
<b>2014</b>	<b>87</b>	<b>3,131</b>
2022 Predicted	45	1,697
Safety Margin	5	170
<b>2022 Budget</b>	<b>50</b>	<b>1,867</b>
2030 Predicted	28	1,249
Safety Margin	3	125
<b>2030 Budget</b>	<b>31</b>	<b>1,374</b>

## **B. What Is a Safety Margin?**

A “safety margin” is the difference between the attainment level of emissions (from all sources) and the projected level of emissions (from all sources) in the maintenance plan. The highway emission budgets include a safety margin, which was created by setting aside a portion of the difference between attainment year and maintenance year emissions of PM<sub>2.5</sub> and NO<sub>x</sub> to accommodate unanticipated growth in highway vehicles. The safety margin is the extra emissions reduction below the attainment levels that can be allocated for emissions by various sources as long as the total emission levels are maintained at or below the attainment levels. Tables 10 and 11 show that the amount of emission reductions anticipated between 2014 and 2022 and between 2014 and 2030 that accommodates the safety margins granted for the Delaware and Lebanon Areas.

**Table 10. Comparison of Safety Margin to Total Anticipated Emission Reductions in 2022 and 2030 (Tons) for Delaware County**

Delaware County	PM <sub>2.5</sub>	NO <sub>x</sub>
<b>2014</b>	1,856	13,001

<b>2022</b>	1,814	10,157
<b>2030</b>	1,853	9,120
<b>2014-2022 Anticipated Emission Reductions</b>	43	2,844
<b>Safety Margin Granted</b>	4	183
<b>2014-2030 Anticipated Emission Reductions</b>	2	3,881
<b>Safety Margin Granted</b>	0	87

**Table 11. Comparison of Safety Margin to Total Anticipated Emission Reductions in 2022 and 2030 (Tons) for Lebanon County**

<b>Lebanon County</b>	<b>PM<sub>2.5</sub></b>	<b>NO<sub>x</sub></b>
<b>2014</b>	1,343	5,443
<b>2022</b>	1,244	3,771
<b>2030</b>	1,249	3,238
<b>2014-2022 Anticipated Emission Reductions</b>	99	1,672
<b>Safety Margin Granted</b>	5	170
<b>2014-2030 Anticipated Emission Reductions</b>	94	2,205
<b>Safety Margin Granted</b>	3	125

### **C. Why Are the MVEBs Approvable?**

The 2014, 2022, and 2030 MVEBs for the Delaware and Lebanon Areas are approvable because the MVEBs for NO<sub>x</sub> and PM<sub>2.5</sub> continue to maintain the total emissions at or below the attainment year inventory levels as required by the transportation conformity regulations.

### **D. What Is the Adequacy and Approval Process for the MVEBs in the Delaware and Lebanon Areas Maintenance Plans?**

In this case, EPA is concurrently processing the action on the maintenance plan and the adequacy process for the MVEBs contained therein. In this proposed rule, EPA is proposing to find the MVEBs adequate and also proposing to approve the MVEBs as part of the maintenance plan.

The MVEBs cannot be used for transportation conformity until the maintenance plan update and associated MVEBs are approved in a final Federal Register notice, or EPA otherwise finds the budgets adequate in a separate action following the comment period.

If EPA receives adverse written comments with respect to the proposed approval of the Delaware and Lebanon Areas MVEBs, or any other aspect of our proposed approval of this updated maintenance plan, EPA will respond to the comments on the MVEBs in the final rulemaking action or proceed with the adequacy process as a separate action. EPA's action on the Delaware and Lebanon Areas MVEBs will also be announced on EPA's conformity web site: <https://www.epa.gov/state-and-local-transportation>.<sup>7</sup> The public comment period will end at the same time as the public comment period for this proposed rule. EPA's analyses of the MVEBs for the Delaware and Lebanon Areas can be found in EPA's MVEB TSDs prepared for this action, available online at <https://www.regulations.gov>, Docket ID: EPA-R03-OAR-2019-0262.

## **VI. Proposed Action**

EPA's review of this material indicates that the Delaware and Lebanon Areas meet the requirements for redesignation to attainment for the 2012 annual PM<sub>2.5</sub>. EPA is proposing to grant PADEP's redesignation requests and to determine that the Delaware and Lebanon Areas meet the 2012 annual PM<sub>2.5</sub> NAAQS, based on the most recent three years of certified air quality data. The effect of this proposed action, if finalized, would be to change the designation status of the Delaware and Lebanon Areas from nonattainment to attainment for the 2012 annual PM<sub>2.5</sub> NAAQS, thereby removing the requirement for a nonattainment new source review permitting

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<sup>7</sup> Once there, click on "Adequacy Review of SIP Submissions."

program and stopping the sanctions clock associated with a finding of failure to submit NNSR updates for the annual PM<sub>2.5</sub> NAAQS. EPA is also proposing to approve PADEP's maintenance plans for the Delaware and Lebanon Areas as revisions to the Pennsylvania SIP. EPA is also proposing to find the 2014, 2022, and 2030 PM<sub>2.5</sub> and NO<sub>x</sub> MVEBs contained in the maintenance plans for the Delaware and Lebanon Areas adequate and is also proposing to approve these MVEBs into the Pennsylvania SIP for transportation conformity purposes. EPA is soliciting public comments on the issues discussed in this document. These comments will be considered before taking final action. Although EPA is proposing approval of the redesignation requests and maintenance plans for the Delaware and Lebanon Areas in one rulemaking, EPA views each redesignation request as a separate request and each maintenance plan as a separable SIP revision. Thus, should EPA receive comment on one redesignation request or maintenance plan, but not the other, EPA will treat the comment as only pertaining to that specific redesignation request or maintenance plan and may take separate, final action on the remaining redesignation request or maintenance plan.

## **VII. Statutory and Executive Order Reviews**

Under the CAA, the redesignation of an area to attainment and the accompanying approval of the maintenance plan under CAA section 107(d)(3)(E) are actions that affect the status of the geographical area and do not impose any additional regulatory requirements on sources beyond those required by state law. A redesignation to attainment does not in and of itself impose any new requirements, but rather results in the application of requirements contained in the CAA for areas that have been redesignated to attainment. Moreover, the Administrator is required to approve a SIP submission that complies with the provisions of the Act and applicable Federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, EPA's

role is to approve state choices, provided that they meet the criteria of the CAA. Accordingly, this action merely approves state law as meeting Federal requirements and does not impose additional requirements beyond those imposed by state law. For that reason, this proposed action:

- Is not a “significant regulatory action” subject to review by the Office of Management and Budget under Executive Orders 12866 (58 FR 51735, October 4, 1993) and 13563 (76 FR 3821, January 21, 2011);
- Is not an Executive Order 13771 (82 FR 9339, February 2, 2017) regulatory action because SIP approvals are exempted under Executive Order 12866.
- Does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 et seq.);
- Is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 et seq.);
- Does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104-4);
- Does not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- Is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- Is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);

- Is not subject to requirements of Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the CAA; and
- Does not provide EPA with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).

In addition, this proposed rule, proposing to approve Pennsylvania's redesignation requests and maintenance plans for the 2012 PM<sub>2.5</sub> NAAQS for the Delaware and Lebanon Areas, does not have tribal implications as specified by Executive Order 13175 (65 FR 67249, November 9, 2000), because the SIP is not approved to apply in Indian country located in the state, and EPA notes that it will not impose substantial direct costs on tribal governments or preempt tribal law.

#### **List of Subjects in 40 CFR Part 52**

Environmental protection, Air pollution control, Carbon monoxide, Incorporation by reference, Intergovernmental relations, Lead, Nitrogen dioxide, Ozone, Particulate matter, Reporting and recordkeeping requirements, Sulfur oxides, Volatile organic compounds.

**Authority:** 42 U.S.C. 7401 et seq.

Dated: July 5, 2019.

Diana Esher,  
Acting Regional Administrator,  
Region III.

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